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# **A socio-digital ecology approach to understanding digital inequalities among young people**

## **Background**

Recent research in the UK and the Netherlands shows that inequalities in the achievement of beneficial outcomes of Internet use cannot be fully explained by inequalities in skills or types of engagement with Information and Communication Technologies (Van Deursen, Helsper, Eynon, & Van Dijk, 2017). That individuals with similar socio-demographic backgrounds and similar skill levels engage in different ways with ICTs poses problems for the standard explanations of digital inequalities. This commentary argues that a socially contextual approach which considers everyday resources, needs and perceptions rather than just demographic characteristics or skill levels is needed to explain digital inequalities amongst young people (Helsper, 2012; Helsper, Van Deursen, & Eynon, 2015).

Perceptions of ICTs are rarely measured alongside skills and access but might be the missing link in explaining why individuals with similar backgrounds achieve different outcomes (Coleman, Gibson, Hanson, Bobrowicz, & McKay, 2010; Jaeger, 2012; Reisdorf & Groselj, 2015). However, theorization around how to conceptualize and explain differences in perceptions of ICTs is weak in comparison to theorization around skills and access. Scattered empirical studies hint at a three-fold conceptualization of perceptions distinguishing motivations (i.e. personal interests), attitudes (i.e. perceptions of ICT-related benefits and risks), and dispositions (i.e. social pressures or norms within a particular social context) (Eynon & Geniets, 2016; Hakkarainen, 2012; Helsper, 2016).

These conceptualizations hint at what might be potential predictors of these different types of perceptions. Motivation studies often use post hoc classifications and hypothesize that what leads to motivations are the personality and needs of the individual. For example, a person uses ICTs for entertainment or news to satisfy escapism or information needs. Disengaged individuals do not see ICTs as useful or do not see themselves as able to satisfy their needs (Jaeger, 2012; LaRose, Mastro, & Eastin, 2001). Attitude-based research is mostly qualitative and focuses on how individuals

perceive technologies in terms of content or design; those who disengage perceive the digital world as full of risks or as confusing and not for them (Porter & Donthu, 2006; Reisdorf & Groselj, 2015). In these studies, the assumption is that these attitudes are entangled with general feelings of exclusion such as being “left out” or living in the “Dark Ages” (Cushman & Klecun, 2006). The latter can be related to dispositions, that is, perceptions based on external pressures or norms to fit in or connect with others rather than personal interests or experiences (Eynon & Geniets, 2016; Park, 2014).

Thus, the personal and social environments of individuals form the perceptions of the digital environments they live in and their engagement within these. Individual differences in these socio-digital ecologies might explain inequalities in outcomes from digital engagement between young people from similar backgrounds or with different skill levels. However, the incorporation of perceptions alongside socio-demographics, access and skills is virtually absent in research around youth inequalities.

### **NEETs case study**

Young people Not in Education, Employment or Training (NEETs) are considered the most disadvantaged group of young people in a traditional sense. As a group they have two specific characteristics linked to digital exclusion in adults: low socio-economic status (SES) and limited social capital (Blank & Groselj, 2014; van Deursen & van Dijk, 2015). There is little research into digital inclusion of disadvantaged youth and it consists mostly of small scale qualitative studies. These show that these youth lack personal ownership of devices, constantly seek free WiFi connections, can only go online for limited time periods and lack privacy when accessing ICTs in public spaces such as job centers, community centers and libraries (Eynon & Geniets, 2016; Thornham & Cruz, 2016). In addition, NEETs exhibit low information literacy and self-efficacy, leading to confusion, frustration and defeatism online as well as offline (Buchanan & Tuckerman, 2016; Maguire, Spielhofer, & Golden, 2012; Smith & Wright, 2015).

However, the DiSTO ‘Socio-Digital Skills of Disadvantaged Youth’ project<sup>1</sup> recently showed through focus groups and a large scale survey that lower skill and literacy levels do not satisfactorily explain NEET disengagement. The same activities and outcomes of ICT use are experienced differently by NEETs and their more advantaged peers. This showed in online job searches; NEETs interpret a lack of response as personal rejections as is exemplified in this quote:

*“You don’t even get like a thank you email to say ‘we’ve received the email’ [...] you’re emailing say 50 of them in a week and you get no response. No ‘Thank you, we’ve received your email for this position’ [...] they don’t even bother”.*

Their more advantaged peers interpret this as system failures rather than personal rejections. NEETs’ frustrations were not with the negative outcome (i.e. not getting a job) but with not being acknowledged, the dehumanizing experience and the lack of control that they perceive in these interactions. They fall back on offline job searches, feeling more respected and in control even if the outcome is the same. That is, they would rather be rejected face-to-face. This different interpretation can only be understood through their social contexts and personal histories. NEETs are repeatedly told in formal institutional settings that they are stupid or lazy even when their actions or results are similar to those of others (Maguire et al, 2012; Smith & Wright, 2015). They become habituated to rejection and develop coping and resistance strategies to deal with these attacks on their self-efficacy that are embedded in face-to-face contexts but do not translate to the digital world.

The DiSTO projects have found important distinctions in who shapes perceptions of and experiences with ICTs. The dominance of and preference for face-to-face interactions amongst people in NEETs immediate environment might be key, since they see their social circles as disconnected from the digital world.

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<sup>1</sup> <http://www.lse.ac.uk/media@lse/research/DiSTO/Home.aspx>

*“...my parents like, even the older generation, even [...] like most of my friends, they don't use their phones that often. And I will go, I'm not a phone person, and I leave it, my friends leave it and live a normal [life], so I'm not on it.”*

The DiSTO surveys show that NEETs rely on close but inexperienced and narrow networks of support to develop an understanding of ICTs (Helsper, 2016). Research with adults suggests that individuals in these networks are less likely to help when needed or to allow for independent skill development (Beck, 2015; Courtois & Verdegem, 2016; Helsper & Van Deursen, 2016; Russell, Simmons, & Thompson, 2011; Thompson, 2011).

NEETs experience their world and the digital world as separate, rather than co-existing and seamlessly integrated as it is often assumed to be for young people. They have an almost nostalgic sense of a world gone by more often associated with older generations.

*"If you didn't have Facebook, you'd fill your time with other stuff like school or going out and seeing friends for real [...] like we have no wi-fi, we have no signal and like everyone's so much happier and more social and like, we'll go and we'll have barbecues, and have a drink together and go surfing, and we don't really care what's going on in the real world, or what's going on in Facebook."*

The risks and barriers in a non-digital world are recognizable for NEETs, while the "computer rubbish" world is an unfamiliar place with less trustworthy individuals. One of the most striking findings of the DiSTO NEETs survey is how much less trusting NEETs are than non-NEETs of others online (Helsper, 2016). In summary, as is the case for adults, a young person's social-institutional networks are important in determining the likelihood and breadth of engagement with ICTs (DiMaggio & Garip, 2012).

The DiSTO studies show that access, use, skills and confidence coexist not only with a set of individual motivations and attitudes towards ICTs but also with different levels of social pressure to

use ICTs. Overall, young people's motivations, attitudes and dispositions are strongly correlated but for NEETs there are apparent contradictions in their perceptions of ICTs (Helsper, 2016). While NEETs have positive attitudes towards ICTs, they feel neither as much social pressure nor personal motivation to use them. Some NEETs who rely on their close networks indicate they would lose nothing if the internet or their phone would be taken away, an attitude that is almost nonexistent amongst their peers with broader networks. These NEETs imagine a sea of digital possibilities for others, just not for them.

## **Conclusion**

Young people with similar socio-demographic, access and digital skill characteristics but different social support networks and digital environments when they were growing up achieve different outcomes from engagement with ICTs. To understand digital inequalities amongst youth we need to look at the socio-digital ecologies in which they grew up and in which they currently live and consider how these shape their motivations, attitudes and dispositions. Simply improving disadvantaged youth's access or skill levels will not lead them to achieve beneficial outcomes of ICT use.

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